

## **DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**DATE:** 19 October 2007  
**SUBJECT:** Pantex Plant Weekly Report

**Sitewide Power Outage:** BWXT completed its week-long planned electrical shutdown last Friday with the expectation that it will ultimately improve system reliability. The high-voltage system was taken down for the first time in 30 years to allow execution of preventive and corrective maintenance activities that would have been performed in a more hazardous environment if the systems were energized. Feedback provided during the out-brief indicated the outage was well planned and conducted. A few upgrade needs were identified (e.g., replacement of a generator and uninterruptible power supply) and several issues were noted when power was restored to equipment that supports nuclear facilities.

**Configuration Management of the Documented Safety Analyses (DSA):** Three weeks ago, BWXT requested PXSO approval to defer more than 20 controls to Phase II of the End State DSA Project. These controls have been approved by PXSO but not yet verified as implemented and posted to the DSA by BWXT. BWXT expects to delete several of these controls in the near future because they are no longer needed (e.g. interactive electronic procedures related controls). PXSO responded that deferring the implementation verification and posting activities for these controls to Phase II is not the correct approach. PXSO reiterated the need to regain configuration control of the DSAs by resolving these type of issues and posting approved, un-posted change packages and associated controls.

**BWXT Explosive Safety Responsibilities:** In its approval letter forwarding the W76-1 disassembly and inspection Nuclear Explosive Safety (NES) study draft final report to BWXT, PXSO tasked the contractor to conduct an independent assessment of its processes and procedures for involving explosives safety subject matter experts in the review of nuclear explosive operations (NEOs). Although the review determined that an established process exists for involving NES in the review of NEOs, the current process does not explicitly define the roles of personnel responsible for assuring that the applicable explosive safety requirements outlined in DOE M 440.1-1A, *Explosive Safety Manual*, are met. While the five NES personnel who review nuclear explosive operating procedures (NEOPs) have some level of knowledge of explosives hazards, this qualification is not formally documented pertaining to review of NEOPs. BWXT has recommended that to resolve this gap, it will incorporate an explosives safety element into NES personnel qualifications and establish qualifications for explosives safety personnel that review NEOPs.

**Zone 4 Replacement Project:** BWXT continues to develop the Mission Need Statement and Program Requirements Document in support of CD-0 approval by 1 December 2007. The alternative being pursued is an underground staging facility for weapons and pits in the Zone 12 material access area. Two different design bases are being considered: one is based on an existing underground storage complex and the other on a Sandia National Laboratories analysis.